

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process of producing man-made vitreous fibres having a phosphorus content of at least 0.5%, measured as weight % P₂O₅, comprising
 - providing a charge of mineral material which includes briquettes,
 - melting the charge in a furnace to provide a melt and fiberising the said melt to form fibres,

wherein the briquettes comprise a non-virgin rock material comprising at least 2% phosphorus, the non-virgin rock material being selected from the group consisting of sewage sludge ash, bone meal ash, granulated sewage sludge slag and mixtures thereof, and wherein the sewage sludge ash content in the briquettes is not more than 20%.
2. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises at least 3% phosphorus.
3. (Previously Presented) The process according to claim 2 in which the non-virgin rock material comprises at least 5% phosphorus.
4. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises sewage sludge ash.
5. (Previously Presented) The process according to claim 1 in which the non-virgin rock material comprises granulated sewage sludge slag.
6. (Currently Amended) The process according to claim 1 in which the briquettes comprise at least 3% by weight, ~~preferably at least 4% by weight, more preferably at least 5%~~ and not more than 25% by weight non-virgin rock material.

7. (Currently Amended) The process according to claim 1 in which the briquettes comprise ~~not more than 25%, preferably at least 4% by weight and~~ not more than 15%, ~~more preferably not more than 10%,~~ by weight non-virgin rock material.

8. (Previously Presented) The process according to claim 1 in which the non-virgin rock material is granulated sewage sludge slag and the briquettes comprise not more than 50 wt.% granulated sewage sludge slag.

9. (Currently Amended) The process according to claim 1 in which the non-virgin rock material is sewage sludge ash and the charge of mineral material contains from 1 to 25%, ~~preferably from 4 to 15%~~ sewage sludge ash, by weight of charge.

10. (Currently Amended) The process according to claim 1 in which the briquettes additionally comprise waste ~~[.]~~ mineral wool.

11. (Previously Presented) The process according to claim 1 in which the briquettes are produced at least two days prior to their inclusion in the charge.

12. (Currently Amended) The process according to claim 1 in which the fibres comprise less than 22% aluminium, ~~preferably less than 17%, most preferably between 10 and 15% aluminium, measured as weight % Al₂O₃ and from 0.5 to 10% phosphorus, preferably less than 5% phosphorus, measured as weight % P₂O₅.~~

13. (Currently Amended) The process according to claim 1 in which the fibres comprise ~~from 0.5 to 10% phosphorus, preferably at least 1% to less than 5% phosphorus, measured as weight % P₂O₅.~~

14. (Canceled)

15. (Currently Amended) The process according to claim 1 in which at least 90%, ~~preferably at least 92%, more preferably at least 95%~~, of the phosphorus in the charge is transferred into the melt and the fibres.

16. (Currently Amended) The process according to claim 1 in which the furnace is a shaft furnace, ~~preferably a cupola furnace~~.

17. (Currently amended) The process according to claim 16 in which iron is tapped from the furnace ~~and is preferably reused in an iron foundry~~.

18. (Currently amended) The process according to claim 1 in which the fibres comprise ~~less than 4% - an aluminium content~~, measured as weight percent Al₂O₃, ~~of less than 4%~~.

19. (Original) A process of producing man-made vitreous fibres comprising providing a charge of mineral material which includes briquettes, melting the charge in a furnace to provide a melt and fiberising the melt to form fibres, wherein the briquettes comprise sewage sludge ash in an amount of not more than 20% of the briquettes.

20 - 21. (Canceled)

22. (Currently amended) The process according to claim [[20]] 1 further comprising forming fibres into a product which is an insulation product, growth substrate or a granulated filler.

23. (Canceled)

24. (New) The process according to claim 1 in which the briquettes comprise at least 5% by weight and not more than 10% by weight non-virgin rock material.

25. (New) The process according to claim 1 in which at least 92% of the phosphorus in the charge is transferred into the melt and the fibres.
26. (New) The process according to claim 1 in which at least 95% of the phosphorus in the charge is transferred into the melt and the fibres.
27. (New) The process according to claim 16 in which the shaft furnace is a cupola furnace.